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This study assessed certain factors affecting the post-high-school adjustment of male negroes. Data came from twelfth-grade students in 1960 and from a followup questionnaire in 1965. The study is descriptive only, because sound information on racial identity was unavailable in 1960 and because, for several reasons, out of 90,637 questionnaires with a 39% return, very few usable subjects were found. The research method and selected variables are described. Three null hypotheses were tested: (1) environmental parameter groups are indistinguishable in terms of post-high-school employment adjustment and student factors; (2) there are no significant differences among the groups related to environment; (3) there are no significant selected environmental factors that influenced students in choice of or plans for post-high-school education. No. 1 was tested by a partial canonical discriminant analysis, No. 2 by a multivariate analysis of variance (Hall and Cramer 1962); No. 3 by Chi-square tests. The first was rejected in terms of geographic regions and community types, but not in terms of Negro density. The second was rejected because of significant regional differences. The third was not rejected, as it was concluded that the differences in regional, community, and Negro density groups occurred by chance and that those in post-high-school adjustment were not significantly affected by region, type of community, or Negro density in the school. (HH)

Environmental Factors, Student Variables, Post-High-School Employment Adjustment, and Post-High-School Education of Male Negroes from the Project TALENT Sample[1]

Paper Read at the 1969
American Educational Research Association
Meeting at Los Angeles, February 1969

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Introduction

Project TALENT, conceived by John C. Flanagan (1962) in the late 1950's, is a national longitudinal study of American youth at the secondary school level - grades 9-12. The design of the study was broken up into two phases. The first phase was two days of educational-psychological tests and inventories administered to 440,000 students in grades 9-12 from over 1,300 schools (approximately 5% of the high schools in the U.S.). Data were also collected about the participating schools. The second phase is concerned with collecting data from the participants, via follow-up questionnaires one year after the class graduated from high school, and multiples of five years after the class graduated from high school. By relating the follow-up data to the 1960 data, it is possible to investigate, on a large scale, across and within regions, school effects over long periods of time. From the design just stated comes the origin and data for this study.

Specifically, the intent of this study was to assess the effects of the percentage of Negroes in schools and other factors on the post-high-school adjustment of male Negroes. Two types of data were used. The first was data collected from students tested as twelfth graders in 1960 and their schools. The second was race and post-high-school adjustment information obtained from the five year follow-up questionnaire sent to these same young people in 1965.

1 This study was completed while the author was a Post-Doctoral Fellow at Project TALENT, American Institutes for Research. The study was a part of the Project TALENT Five-Year Follow-Up Studies supported by the U.S. Office of Education: contract number O.E.-6-10-065.

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Because the sample used in this study could only be identified through the five-year follow-up questionnaire, the number of male Negroes was not expected to equal the number in the original twelfth grade sample. In 1960, the climate did not permit researchers to require subjects to indicate their race; by 1965, because a great deal of significant information was lost, questions on race were permitted. Since the race question appeared on the five year follow-up questionnaire, the response was optional (respondents need not answer the question). Because of this situation, the number of male Negroes who were identified was far below what was expected. There appeared to be no way of identifying respondents by going back to information held in 1960. This was tried, and the researcher picked up only four additional subjects - three of whom did not provide information on the variables concerning this study. Consequently, the scope of the study was greatly limited. It became a descriptive study and not one of inference in nature.

Out of 90, 637 questionnaires sent to the twelfth grade participants in the 1960 sample, 35, 742 were returned (39%). Only 1, 304 were from those who identified themselves as Negroes. Normally, one would expect the number to be over 3,000. Of the 1,304, only 399 were males. Actually, there should have been 8,900 Negroes in the twelfth grade sample, and about 4,200 of them males. It is quite evident that the number of respondents in this study precluded any inferences to the twelfth grade Negro population of 1960. If one only considers respondent bias, the lack of numbers in the study becomes significant. Even when non-respondents were added to the sample, the total came to 466 - hardly enough to consider as an adequate sample from which conclusions could be inferred. The number of usable subjects involved in the analysis was a function of pertinent data available. This ranged from 224 to 360 subjects.

It should be added that the under-count is not unique to Project TALENT. The U.S. Bureau of the Census has a similar problem. Siegel and Zelnik (1966) reported a 21.2 percent undercount for non-white males in the 1960 census. Bogue, Misra, and

Dandekar (1964) also found considerable estimates of net under-counts of the Negro population.

Related Literature

The nature of schools attended by Negroes has had an influence on their school achievement, self-image, and aspirations, (Bloom, Davis, and Hess, 1965; Coleman, 1966; Derbyshire and Brody, 1964; Mussen, 1953; St. John, 1966).

Coleman (1966, p. 22-23) found that school achievement of minority children depended more on the schools they attended than did the achievement of majority children. Student achievement (stronger for Negroes than for whites) is strongly related to the educational backgrounds and aspirations of the other students in the school. Negroes in schools with a higher proportion of whites have a greater sense of control over their environments and future than those who attend schools with smaller proportions of whites. Coleman (1966, p. 29-31) also found that there were positive, although rather small, effects of integration in terms of reading and mathematics test performances. These effects were particularly noticeable where more than one-half the classmates were white; scores were higher for Negroes attending segregated schools than for those where the proportion of whites was less than one-half.

St. John's findings (1966, p. 294) suggest that a Negro child's self-esteem and motivation are more threatened by a desegregated school than a segregated school, whereas, Mussen (1953) and Bloom, Davis, and Hess (1965) found that disadvantaged groups do not attain the educational and vocational goals typical of middle-class American society. Bloom, Davis, and Hess (1965) did however find that Negro parents and their children have extremely high levels of aspirations; this finding was confirmed by Coleman (1966).

Employment opportunities also have a cause and effect role in conflicts for the Negro. It appears that schooling for Negroes is not realistic in terms of job opportunities as reported by Pettigrew (1965) and the National Industrial Conference Board (1966).

Such findings, as stated in the preceding paragraphs, become quite significant as related to Negroes in the present American culture and to this study.

Method

Variables Used and Studied

Student and environmental factors were culled from the 1960 Project TALENT Data tapes. Information concerning post-high-school adjustment variables was obtained through the five-year follow-up questionnaire. Information concerning race classification was found in the questionnaire as well.

Student Variables

1. Socio-Economic Environment (SEE) Index was created from nine TALENT Student Information Blank (SIB) items. SEE stresses environment rather than status.

2. General Academic Aptitude Composite (C-002) was developed from eight TALENT aptitude and ability tests. It was assumed to describe academic aptitude.

Environmental Factors

1. Negro Density of the high school indicates the ratio of Negro pupils in the school to the entire school population. As a result of the numbers distributed across the proportions, two classifications were used: 0 - .49 (low density) and .50 - 1.00 (high density).

2. Community indicates whether the school serves primarily an urban (communities over 5,000) or rural (rural and small towns under 5,000) population.

3. Regions. Project TALENT used the nine geographical regions (as used by the U.S. Office of Education) in the 1960 survey. Subjects who went to school in the Northeast and Mid-West were pooled into one classification. Subjects from the South remained. Due to the lack of respondents and non-respondents from other regions, they were dropped from the analysis.

Post-High-School Adjustment Variables

1. Job Stability - number of years on the job held as of October 1, 1965.

2. Job Satisfaction - how the subject felt about the job he held on October 1, 1965.

3. Number of jobs - how many full-time jobs held from 1960-1965.

4. Rise of Earning Power (yearly) - The differences between the present salary and starting salary for the job held on October 1 for full-time employees with job stability and levels of post-high-school education partialed out. Full-time employment for subjects was defined as twenty hours or more per week, and subjects were not engaged in full-time study.

Post-High-School Education

1. Level of Post-High-School Education - the continuous variable scaled from 0 (no post-high-school education) to 7 (advanced degree, e.g. Ph.D.) was compressed into a dichotomy of "none" (no post-high-school education) and "additional education" (all other gradations). "Additional education" was also broken down into technical school education (non-college) and college experience.

2. Planned Post-High-School Education - was also dichotomized into "none" and "additional education".

Focus of the Study

The study was to determine the effects of geographic region, community type, and the percent of Negroes in a school on the Student and Post-High-School Adjustment and Educational variables just described. The study did not attempt to compare the Negroes in the sample to the total Project TALENT 12th grade sample.

The following null hypotheses were tested:

1. Environmental-parameter groups cannot be distinguished in terms of post-high-school employment adjustment and student factors.

2. There are no significant differences among the groups related to environmental factors.

3. There are no significant selected environmental factors that influenced students in the type of post-high-school education acquired and future educational plans.

The Sample - The major portion of the subjects were identified through the questionnaire.

The non-respondents were contacted personally either by Project TALENT regional coordinators or the Retail Credit Company. (4% sample of non-respondents from the total twelfth grade sample were contacted). Sixty-seven (67) non-respondent males were added to the 399 male respondents for a total of 466.

Weights could not be used because of the distribution of the sample across regions.

Under the conditions of this study, it would have resulted in six subjects representing 15,000 subjects - hence weights were not used.

Because highly significant differences between respondents and non-respondents were found in previous TALENT research (One-Year Follow-Up Studies (1966)), it was decided to test if there were highly significant differences in this study. The object was to determine if it would be possible to pool the two groups and inflate the number in the sample studied. The t test of differences between two means for independent samples was used with Socio-Economic Environment Index (SEE) as the dependent variable tested.

The SEE mean of the male Negro respondent group was 90.77 with a standard deviation of 10.20; the mean of the non-respondent group was 88.49 and a standard deviation of 9.02. The t test with d.f. of 464 did not reach the .01 level of significance (t=1.73). Thus, it was decided that both subsamples could be merged for subsequent analysis without altering and/or significantly affecting the basic nature of the sample.

Another finding was that the SEE means of both male Negro samples were at least one standard deviation below that of the 12th grade (1960) one year follow-up total male population that included all racial and ethnic groups. The standard deviations were approximately the same.

Similar results were found when the two groups were compared in terms of General Academic Aptitude Composite (C-002). The mean of the male respondent group was 424.93 with a standard deviation of 124.34, the mean of the non-respondent was 383.90 with a standard deviation of 130.82. The t ratio did not reach the .01 level of significance (t=2.31, d.f. of 383 - due to missing data). Again it appeared that pooling the two subgroups would not confound the resulting sample.

It was found that the means of the two subgroups were one standard deviation below the mean of the total male population of the Project TALENT 12th grade sample.

The author stresses that it was not the intent of this study to compare the male Negroes found with the total male 12th grade sample. The above is only informational.

Few subjects from the South attended integrated schools in 1960. No subjects, regardless of region, attended schools where the proportion of Negroes were .50-.59 and

.60-.69. It was decided to pool subjects into two classifications: 0-.49 and .50-1.00. The 0-.49 classification included schools with a general proportion between 0 to .29, and that the .50-1.00 really indicated a segregated school population.

Because of the community distributions initially identified by Project TALENT (small town, rural, suburban, urban), it was decided to merge classifications into rural and urban. The majority of subjects attended schools serving urban regions. Those from rural America tended to go to high Negro density schools to a significantly greater extent than Negroes from urban communities ($X^2=28.785$, $p < .001$). This was true regardless of region - with the South excepted (lack of low Negro density schools) from the comparison.

As a result of the small number of subjects from the West (N=6) and Southwest (N=10), pooling of these regions was not advisable and were not included in future analyses. The Northeast and Midwest regions were merged into one classification. The proportional differences in the merged region was not different from the differences found in the original classifications between rural and urban schools; the numbers in the resultant rural and urban categories were inflated.

Thus there were six cells or groups evolved from the sample. They were: Northeast-Midwest-Urban-high density; Northeast-Midwest-Rural-high density; Northeast-Midwest-Urban-low density; Northeast-Midwest-Rural-low density; South-Urban-high density; and South-Rural-high density.

Investigation of the data from the six categories indicated that subjects from the Northeast-Midwest tended to be above the mean in general aptitude of the total sample, came from higher socio-economic environments and attended desegregated schools in urban areas. Students from the South tended to be below the mean in general aptitude, came from lower socio-economic environments, and attended segregated schools located in either urban or rural communities (although more students attended urban than rural schools).

Employment

Individuals who indicated that they were employed twenty hours or more per week

and didn't indicate other primary activities (i.e., full-time student) were considered full-time employees. If they indicated employment on a part time basis for less than twenty hours and didn't indicate other primary activities, they were considered unemployed. Full-time students, those who could not work because of health reasons, and those who for other legitimate reasons could not be employed were considered out of the labor pool. The available labor pool was 351. The sample's unemployment rate (7.98%) mirrored the unemployment rate of the Negro population in the United States in 1965. The 1965 rate was 7.5 as reported by Hoyle and Ryscavage (1965) of the U. S. Department of Labor.

College Attendance

College experience appears to be quite common in the sample studied. Forty-one point five percent (41.5) of the sample had either attended college (full or part-time) or were in college as of October 1, 1965. These data reinforced the assumption that the sample is atypical of the Negro population.

One interpretation that can be made concerning college attendance is that subjects in the sample viewed themselves as middle-class, hence the middle-class value of college attendance. It is also possible that the sample reflected the new importance and emphasis put on high education by the Negro community.

Statistical Procedures

When subjects were purged because of missing data, the N's in each group were:

Northeast-Midwest-Urban, Low	67
Northeast-Midwest-Rural, Low	7
Northeast-Midwest-Urban, High	29
Northeast-Midwest-Rural, High	10
South-Urban, High	57
South-Rural, High	54
TOTAL	224

A partial canonical discriminant analysis was the statistical procedure used to test null hypothesis 1. The basic assumption was that environmental effects could be identified if either the environmental-parameter groups were unique to each other, or

sets of groups were unique. The analysis would also be able to identify criterion variables that would be most significant in discriminating among groups.

A multivariate analysis of variance developed by Hall and Cramer (1962) was used to test null hypothesis 2.

Chi-square tests were used for hypothesis 3. It was assumed that if a pattern of significant chi-squares appeared when an isolated environmental factor was studied, the isolated environmental factor under study had a significant effect.

Results

Only one significant ($p < .001$) discriminant function appeared. (Refer to Figure 1). Other functions did not reach significant levels. In terms of the variables' correlations with the discriminant function, there are three major contributors to the function.

The General Academic Aptitude Composite (C-002) contributed most to the separation of the six groups along the function. The fact that this correlation (.827) was positiv indicates that a high score on this measure is related to a high score along the functio The Socio-Economic Environment Index (P-801) had the second largest correlation (.622) which was almost equal to the C-002 correlation. Rise of earning power had the third largest (.464), however, it was hardly more than half the size of the C-002 correlation.

Function I is, in effect, a measure of socially valued attributes - in that intelligence, status, and earning power are certainly valued in the American society, and variables measuring such attributes had the highest loadings on the first function. The magnitude of the correlations of these three variables indicates that they were doing mo of the work in separating the six groups. These variables arranged the group into three points: the Northeast-Midwest, urban had essentially identical scores on the function; the Northeast-Midwest, rural groups were almost identical; and the groups from the South were identical. The average within-group standard deviation (indicated in Figure 1) was .731. Group homogeneity is indicated by the standard deviation. When the centroids of a pair of groups are close together and the standard deviation is relatively large, a

considerable overlap in the distributions on the function is indicated. A pair of groups under these conditions would not be considered unique. The trace represents the total discriminating power of the five variables utilized in the discriminant function. The significant function (refer to Figure 1) accounted for 27.33 percent of the total discriminating power possessed by the five variables. The amount of variance accounted for by the only significant function was 26.9 percent (canonical R=.519). Other non-significant functions accounted for 5.4 percent, 2.9 percent, 2.8 percent, and 0.05 percent. It appears that the first function accounted for a significant amount of variance.

The zero-order correlations (Table 1) indicates that almost all the variables were orthogonal to each other and that P-801 and C-002 were initially relatively independent of the other variables. It was felt that partialing P-801 and C-002 (in addition to time on the job and post-high-school education) would give an assessment of the residual discriminatory power of the first function.

The six groups could not be significantly differentiated when the number of covariates was increased from two to four. Rise of earning power had a loading of .464 in the first analysis, in the second analysis, the variable had a loading of .929 on the first function. However, it is clear that what was left of the variable after partialing was not strong enough to be used to discriminate among groups. It is also evident that the student factors (P-801, C-002) in linear combination with rise of earning power had the major discriminatory power in the first function.

It was decided to run a partial canonical discriminant analysis without the student factors to assess the discriminatory power of the employment variables. This was done because it was not known what was left of the post-high-school employment adjustment variables after P-801 and C-002 were partialed.

The resulting function (Figure 2) reached the .06 level of significance, the only discriminant function to reach that level.

Function I (Figure 2) is an earning power function, with rise of earning power being the heaviest contributor with the largest correlation. It appears that rise of

earning power is the only variable that separated the six groups along the function, arranging them into three unique groups:

1. The Northeast-Midwest, urban groups and the Northeast-Midwest, rural, high density group, were in the same centroid space;
2. Groups from the South were identical; and
3. The Northeast-Midwest rural, low density group.

The discriminant function accounted for 36.30 percent of the total discriminating power possessed by the three variables. The first function accounted for only 9 percent of the total variance (Canonical R=.301), and the second and third functions (both non-significant) accounted for 1 percent and 0.3 percent. Although the first function did account for the largest amount of total variance, it did not appear to be a very powerful discriminator.

The results from the partial canonical discriminant analyses indicate that there are environmental (regional and community) factors that do have an effect on post-high school employment adjustment and student factors; however Negro density does not appear to be one of the significant effective factors. Null hypothesis number one ("Environmental-parameter groups could not be distinguished.....") was rejected in terms of geographic regions and community classifications, but not as far as Negro density was concerned.

Hall and Cramer's (1962) multivariate analyses of variance was used to test the effects of the environmental factors on the dispersion of the centroids along the discriminant functions found in the preceding analyses. Regional effects reached the .001 level of significance (F=14.04, 5 and 212 d.f.) with time on the job and post-high-school education partialed from the criterion variables (student and employment variables) Where only employment variables were used as the criterion variables, with time on the job and post-high-school education partialed, regional effects reached the .005 level of significance (F=4.92, 3 and 214 d.f.). Negro density and community factors did not reach levels of significance in either analysis; there were no significant interactions.

The univariate tests in the multivariate analyses indicated that the variables in each set of criteria had the same significant relationships that were found in the discriminant functions of the partial canonical discriminant analyses described in the previous sections of this paper. (Because of the redundancy of the results, the univariate F ratios do not appear.)

The results indicate that there are significant differences among the centroids, and that the differences can be attributed to the effects of region. The second null hypothesis concerning the differences among groups due to environmental factors can be rejected. The rejection was due to significant regional differences; community and Negro density parameters were not significant.

Using responses to several questions on post-high-school adjustment found in the five-year follow-up questionnaire, amount and type of post-high-school education were studied. After the amount (none-additional) was considered, additional education was further broken down into technical and college levels. Technical level includes all individuals who had technical institutional training whether completed or not; college level institutional training whether completed or not; college level includes junior and senior college attendance whether completed or not. In terms of planned post-high-school education, it was felt that those who didn't have additional education (N=120) would be different from those (N=240) who had elected to continue their education beyond high school. Therefore, the subjects were divided into "no post-high-school education" and "had post-high-school education" groups. Each subdivision was studied in terms of planned additional education.

It was found that within all regions, the number of subjects who elected to continue their education beyond high school was greater than the number viewing their high-school education as terminal. Subjects were also more likely to attend colleges than noncollege institutions, in their continuing educational careers. However, the proportional differences between college and noncollege attendance was not very large.

From the data, it was concluded that the greater proportion of subjects had availed themselves of the opportunity to continue their education, and that those who did tended to go to college. These results illustrate the atypicalness of the sample and further reflect the bias that appears in studies dealing with voluntary respondents to follow-up questionnaires.

The proportion of subjects who did not have post-high-school education and did not plan to acquire additional education was greater than the proportion of subjects who did not have post-high-school education but planned to further their education. The reverse situation occurred with those who did have additional schooling. These results indicate that those who were previously motivated to acquire additional education view the necessity for further education to a greater extent than those with no previous post-high-school education. This awareness might be the result of: (1) being predisposed to additional education, (2) additional education already acquired requiring further education, (3) the social acceptability of planning additional education, and (4) students who continue their education after high school being different from those who don't continue their education in terms of school experiences and individual differences.

Environment Effects

The interaction and isolated effects of region, community, and Negro density on responses to the post-high-school adjustment questions were studied. Individual environmental factors were tested to determine if such effects might be masked within the total interaction. In order to isolate, as much as possible, the unique effects of an individual environmental factor, the remaining environmental factors were used as controls. When regional effects were studied, community and Negro density were controlled; when community effects were studied, regions and Negro density were controlled; and when Negro density was studied, region and community were controlled. As a result of the nature of the sample and the scaling properties of the variables studied, nonparametric procedures were used. Chi-square to test the null hypothesis that the distributions did occur by chance

was used. It was assumed that if a pattern of significant chi-squares appeared when an isolated environmental factor was studied, the isolated environmental factor under study had a significant effect on the post-high-school adjustment variable (s). (Referred to Table 2). If a pattern of significant chi-squares occurred across rows of individual environmental factors, it could be concluded that within the level of the individual environmental factors studied nonrandom effects occurred. The educational levels compared were: Post-High-School Education (none vs. additional); Post-High-School Education (technical and college vs. non-college); Planned Post-High-School Education - No Post-High-School Ed. (additional vs. none); and Planned Post-High-School Education; Had Post-High-School Education (none vs. additional).

Discussion

Only one significant nonrandom distribution was found for interaction ($X^2 = 13.670$, $p. < .02$) among the total environmental factors in terms of the differences between additional post-high-school education and none. Closer inspection of the effects of the individual environmental factors indicated that subjects from Region III (Northeast-Midwest, urban, high Negro density) were far more likely to have additional education than those from Region V (South, urban, high density); this difference did not occur by chance ($X^2 = 5.080$, approaches .02). It was concluded that the significant interaction found was generated by the nonrandom difference between Regions III and V.

This significant difference found between the two regions might have been due to the availability of more post-high-school educational institutions in the Northeast-Midwest urban areas than in the Southern urban areas. No differences were found when the two regions were compared at the rural level. It should be noted that regional comparisons could not be made on low Negro density levels because of the absence of low density schools in the South. However, to conclude that the Northeast-Midwest Negro who lived in the city and attended a high Negro density school would most likely have more additional education than his counterpart from the South would be tenuous. It is

also quite possible that the significant X^2 was generated by chance itself, inasmuch as no other significant chi-squares occurred out of the 56 comparisons.

No patterns of rejection of the null hypothesis developed. It was concluded that differences found within regional, community, and Negro density groups occurred by chance. The differences in the post-high-school adjustment variables (types of post-high-school education, and planned post-high-school education) of subjects were not significantly affected by the section of the country, type of community, or the percentage of Negroes in the school attended. Hence the third major null hypothesis that there are no significant selected environmental factors influencing types of post-high-school education acquired and future educational plans was not rejected.

Again the results found could possibly be attributed to: (1) the atypicalness of the sample; and/or (2) Negroes in the sample possibly perceiving themselves as middle class or above and not being affected by regional, community, or Negro density differences in terms of the variables studied. (Generally subjects who respond to questionnaires are of a higher socio-economic status than those who don't respond.)

Discussion

A comparison of the socially valued function with the earning power function indicates that the former is the more powerful of the two in terms of discriminatory power.

It is possible that the position of the Negro in the American society has a suppressive effect on the variability of subjects once they leave the relatively protected, and in some cases artificial, school environment. Hence, student factors, measured while in school, provide better discrimination than do factors, such as post-high-school employment variables, that are affected by the economic and social inequalities faced by Negroes in all sections of the country.

The six groups were not unique to each other; they were divided into three unique centroid spaces. Although the subgroups in the three unique spaces were not identical in each analysis, it does appear that the environmental factors had similar effects,

similar to the extent that there were regional and community differences among schools and no Negro density effects. They were not similar when group positions along the functions were compared. Subjects attending schools in the South were below all Northeast-Midwest groups in terms of the socially valued function, and below all Northeast-Midwest groups but one in terms of earning power. Positions of communities along the functions were different in the two major analyses (although the differences among communities in both analyses were not significantly different); there was little difference among communities in the South along both functions. Urban Northeast-Midwest groups were higher than their rural counterparts along the socially valued function. This was not true along the earning power function; the Northeast-Midwest rural, high density group fell within the same centroid space as the Northeast-Midwest urban groups, thus all the groups in the space were considered identical. Within the limits just described, it was felt that it would be safe to reject the null hypothesis that environmental-parameter groups cannot be distinguished in terms of post-high-school employment adjustment and student factors. Although the environmental-parameter groups can be distinguished, the differences were generated more by regional influences than by the influences of community and/or Negro density factors.

The results indicate that subjects in this study attending schools in the Northeast-Midwest region of the country are "better off" socially and intellectually than those from the South. Income is not as clear-cut, although subjects from the Northeast-Midwest generally had higher income gain than those from the South. The proportion of Negroes in the student body of a school doesn't appear to have an effect on the post-high-school employment adjustment or student factors studied. Regional differences among schools, and not community differences or racial composition, was the most influential environmental factor. In terms of additional education acquired or planned, environmental factors didn't have a significant influence.

The results found in this study might have been a function of the mediating in-

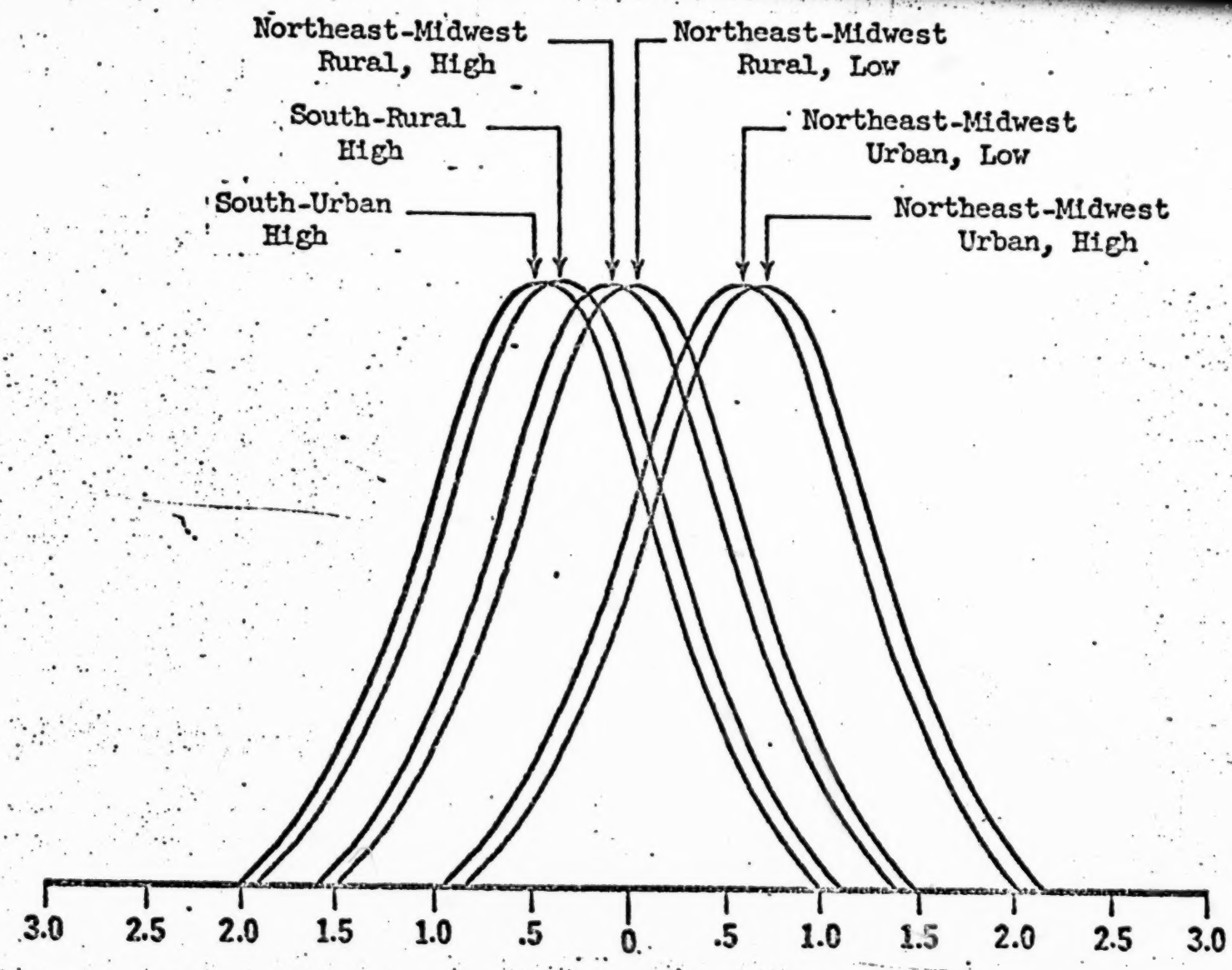
fluences of environmental factors on student, employment, and educational variables, vis-a-vis social status, amounts spent on education, quality of education, and occupational and educational opportunities across environmental levels.

Because of the difficulties encountered with follow-up questionnaires and the problems faced by the author in this study, it is suggested that a long-range panel study be developed of a large number of stratified randomly sampled male Negroes, across all levels of regions and communities, to assess the results found in this study before definitive conclusions can or should be made.

Table 1

Correlations of Student and Post-High-School Adjustment Variables

	Job Satisfaction	No. of Jobs	Rise of Earning Power	P-801	C-002
Job Satisfaction	1.000	.000	.062	-.028	-.132
Number of Jobs	.000	1.000	-.148	-.044	-.101
Rise of Earning Power	.062	-.148	1.000	.074	.076
P-801	-.028	-.044	.074	1.000	.295
C-002	-.132	-.101	.076	.295	1.000



Job Satisfaction (-.091)

Number of Jobs (.107)

Function I

S.D. = .731

% Trace = 27.328

Rise of Earning Power (.464)

P*801 (.622)

C-002 (.827)

Figure 1

Discriminant Function Centroids of Six Region-Community-Negro Density Groups with Job Stability and Post-High-School Education Partialed

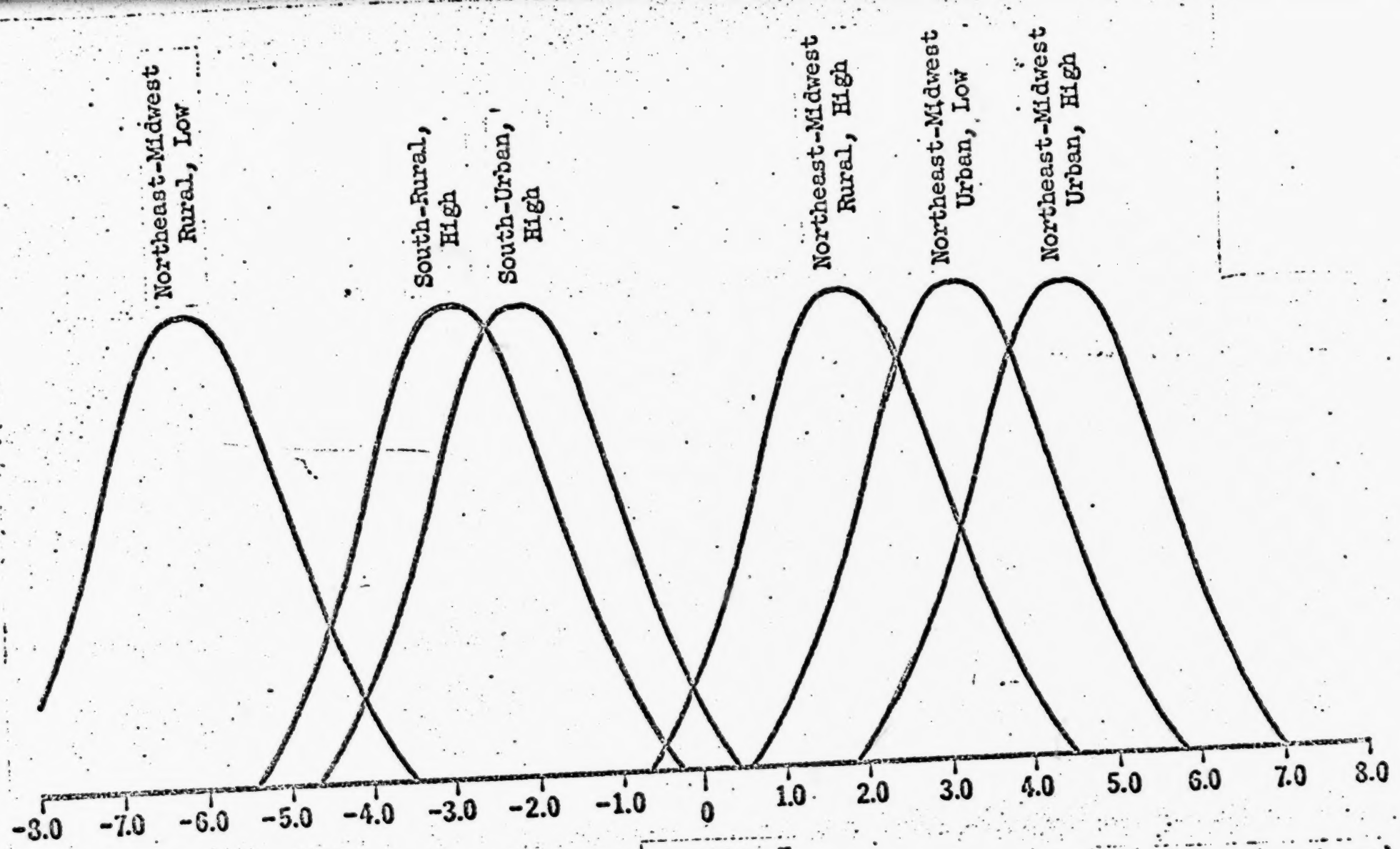


Figure 2

Discriminant Function Centroids of Six Region-Community-Negro Density Groups with Job Stability and Post-High-School Education Partialed

Table 2

Chi-squares of Comparisons for Regional, Community, and Negro Density Effects

	Post-high-school educ. (None-additional)	Post-high-school educ. (Technical-college--non-college)	Planned post-high sch. ed. (No post-h.s. educ.--none-additional)	Planned post-high sch. ed. (Had post-h.s. educ.--none-additional)
Group Comparisons				
Region (NE-S)[1]				
Urban High III-V	5.080*	2.643	.020	1.431
Rural High IV-VI	.510	.071	.036	.071
Community (Rural-Urban)[2]				
NE - Low I-II	.020	.038	.257	.387
NE - High III-IV	1.205	1.014	1.652	1.353
South-High V-VI	.497	.362	.500	.002
Negro Density (High-Low)[3]				
NE - Rural II-IV	.025	.111	.024	.008
NE - Urban I-III	1.715	.107	.001	.034
Interaction-Total Groups Comparison	13.670**	4.454	4.326	4.095

[1] Community and Negro Density Controlled

[2] Region and Negro Density Controlled

[3] Community and Region Controlled

* Approaches the .02 level of significance (d.f.=1)

** $p. < .02$, d.f.=5

BIBLIOGRAPHY

Bloom, B. S., Davis, A., and Hess, R. Compensatory Education for Cultural Deprivation. New York: Holt, Rinehart and Winston, 1965. 179 pp.

Bogue, D. J., Misra, B. D., and Dandekar, D. P. "A New Estimate of the Negro Population and Negro Vital Rates in the United States, 1930-1960", Demography, I (1), 1964. p. 339-358.

Coleman, J. C., Campbell, E., Holson, C., McPartland, J., Mood, A., Weinfeld, F., and York, R. L. Equality of Educational Opportunity. U. S. Office of Education, U. S. Department of Health, Education, and Welfare. Washington, D. C.: Government Printing Office, 1966. 737 pp.

Derbyshire, R. L., and Brody, E. B. "Marginality, Identity, and Behavior in the American Negro: Functional Analysis", International Journal of Social Psychiatry, Volume X, 1964. p 7-13.

Flanagan, J. C.; Cooley, W. W.; Lohnes, P. R.; Schoenfeldt, L. F.; Holdeman, R. W.; Combs, Janet; and Becker, Susan, Project TALENT One-Year Follow-Up Studies. Final Report, Cooperative Research Project No. 2333, Office of Education, Department of Health, Education, and Welfare. Pittsburgh: Project TALENT, University of Pittsbur 1966.

Flanagan, J. C.; Dailey, J. T.; Shaycoft, Marion F.; Gorham, W. A.; Orr, D. B.; and Goldberg, I. Design for a Study of American Youth. Boston: Houghton Mifflin. 1962.

Hall, C. E., and Cramer, E. M. A General Purpose Program to Compute Multivariate Analysis of Variance on an IBM 7090 Computer, Washington, D.C.: George Washington University, The Biometric Laboratory, 1962. 34 pp. Appendices A, B, and C.

Hoyle, K.D., and Ryscavage, P.M. "The Employment Situation in 1965," Monthly Report on the Labor Force. U. S. Department of Labor. 1965.

Mussen, P. H. "Differences Between TAT Responses of Negro and White Boys" Journal of Consulting Psychology, XVII, 1953, p. 373-376.

National Industrial Conference Board. Company Experience with Negro Employment. New York: National Industrial Conference Board. 1966, Volume 1, 175 pp.

Pettigrew, T. F. "Extending Educational Opportunities: School Desegregation", Contemporary Issues in American Education. White House Conference on Education. July 1965. 217 pp.

Siegel, J. S., and Zelnik, M. An Evaluation of Coverage in the 1960 Census of Population by Techniques of Demographic Analysis and by Composite Methods. American Statistica Association, Social Statistics Section, 1966, Washington, 1966.

St. John, N. H. "The Effects of Segregation on the Aspirations of Negro Youth", Harvard Educational Review, XXXVI, Summer 1966. p 284-294.